



April 20, 2004

**Proposal to Develop and Manage  
Database of Site Registrations in 71-76 GHz, 81-86 and 92-95  
GHz Bands**

**Prepared By: Micronet Communications, Inc.**

***This is an amended proposal to the original dated 24 March 2004 to remove requirement for up-front funds to build the registration system.***

This proposal is in reference to DA 04-672 released on March 12, 2004, "Wireless Telecommunications Bureau Opens Filing Window For Proposals to Develop and Manage Independent Database of Site Registrations by Licensees in the 71-76 GHz, 81-96 GHz and 92-95 GHz Bands", WT Docket No. 02-146. In this document, Micronet Communications, Inc. proposes to develop and manage the database of link registrations in this band either as the primary manager or as one of multiple database managers.

**Micronet Qualifications**

Micronet Communications, Inc. is a privately owned company located in Plano, Texas. We have extensive experience building software systems to manage large microwave databases. We currently maintain nationwide databases in various services including point-to-point microwave, Cable Television Relay Service (CARS), Multiple Address Systems (MAS), satellite earth stations, and Personal Communications Service (PCS). Our software engineers have developed user friendly software applications to perform queries and modify the databases in addition to developing many engineering tools to do interference studies, map plots, path profiles, etc. We have extensive experience working with the Federal Communications Commission (FCC) microwave data from the Universal Licensing System (ULS) both importing the data into our format or exporting to the FCC through the batch upload process. Our primary business is Frequency Coordination, Microwave Engineering, Field Services and FCC Filing and compliance. We have been in business since 1984.

**Filings Database**

Micronet Communications proposes to build a relational database structure including all fields listed in Appendix C of the Report and Order, *Allocations and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands*. These fields include things such as registration date, call sign, coordinates, path distance, elevation, antenna information and transmitter information. In order to make the database accessible to licensees, the FCC, and the National Telecommunications and Information Administration (NTIA), we propose to create a World Wide Web interface that can be accessed using a standard browser such as Internet Explorer™ or Netscape Navigator™.

Registration of links will require that FCC rules regarding the band be met. These rules set standards for items such as EIRP, loading, antenna beam width, antenna gain and antenna structure registration. We recommend checks be made to only allow link registration if these rules are met.

Licensees must notify the FCC (or if the FCC prefers, the database manager) when a link is constructed. The construction date of the link's record will be updated with this date. Links that have not been constructed in the required time frame will be deleted. A history of this transaction will be saved, see "History" section below. It is recommended that licensees be notified a month or two prior to deletion in case they overlooked the requirement for construction notification.

The database will update link records based on FCC actions affecting the license. These actions include deletion, license expiration, license renewal and transfer of assignment.

### **Federal Government Coordination**

We will coordinate all registrations through NTIA. An automated data transfer method is preferred if and when NTIA makes one available.

### **Antenna Registration**

Antenna heights must comply with the rules in 47 CFR Part 17. All registrations will automatically be checked for compliance with these rules. The Federal Aviation Administration makes available a list of runways from which the slope requirements can be checked automatically. Valid tower registration numbers must be provided for those antennas that are more than 200 feet or do not meet the slope requirements.

### **Lost Protection Rights**

The capability will exist to store with each link, information to reflect that it has lost protection rights with one or more links.

## **Security**

The database servers will be secured using the latest firewall and anti-virus capability. Encrypted communications will be required for all transactions requiring security such as the process of logging in to the system. Each licensee will be provided a password that will only allow adding, modifying and deleting links belonging to that licensee. We will use commercial, fault tolerant database software with mirrored backup servers in case the primary servers fail.

## **Query Capabilities**

The following query/search capability will be provided:

- Allow query on basic link elements such as licensee name, call sign, registration number, coordinates, frequency or frequency range.
- Retrieve all link registrations for a given licensee name or call sign
- Retrieve all link registrations in a specified geographic area. In addition, will allow a geographic search combined with a frequency range.
- Retrieve all link registrations filed in a given time period
- Retrieve all link registrations removed in a given time period
- Provide special interface and reports as required by the NTIA to allow them to maintain an accurate database
- Provide for complete download of the database records for the FCC in a format they specify
- Provide custom reports as requested to do so by NTIA or the FCC

## **Cooperation with Other Managers**

We understand that the commission may decide to designate other database managers. We are willing to work with other potential managers to determine the best method for sharing database access among multiple companies. Various options are available, including either a centralized, mirrored or distributed database. We would respect any decision agreed to and will fully cooperate with all other managers to insure all managers are equally able to provide link registration services.

In our opinion, the use of multiple database managers is the better option to best serve the public interest. This option will encourage competition resulting in lower costs to licensees. Competition will also kindle the database managers to

strive for the most easy to use link registration service with a richer set of services.

## **History**

Having been in the microwave business for twenty years, we understand the importance of knowing the history of changes made to a link. We will track all changes made to each link and the date of the change. Users will have the ability to view these changes. In addition, an unlimited number of dates of various events associated with the link can be stored. Deleted links will be marked as deleted and will be given a date deleted and the reason for deletion.

## **Conflicts of Interest**

Micronet Communications is a privately held provider of consulting services. We do not own or operate any wireless networks and therefore do not have any microwave licenses nor do we have plans to have any in the future. Micronet is not owned or affiliated with any entity that owns microwave links or sells microwave radios, antennas or related devices. We therefore certify that we will not be licensees.

## **Optional Services**

Optional services will include interference analysis, frequency protection, reliability analysis, path propagation analysis and path surveys. We will also set up a help desk to provide assistance to users of the database.

## **Timetable**

|  |                     |
|--|---------------------|
| Determine Requirements                         | 30 days             |
| Design and Development                         | 90 days             |
| Testing  | 30 days             |
| Demonstration                                  | 30 days             |
| Implement Changes Resulting from Demonstration | 30 days             |
| Total Time To Launch                           | 180 days = 7 months |

## **Contact**

Our contacts regarding this proposal are:

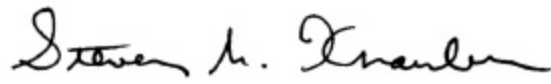
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Respectfully Submitted,

A handwritten signature in cursive script that reads "Steven M. Knauber".

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Charles Youngblood  
President